Questions/Answers for RFI Solicitation AAI080975-11-006 – Data Center Clustered Storage

You requested 50,000 IOP/s. Can you provide some detail regarding a typical IO size and distribution across multiple LUNs?	Typical random IO is primarily derived from database transactions. VM servers running MySQL, MS SQL, Oracle and FileMaker Pro services host multiple application data stores. We are looking at approximately 1 high-use database and 3-4 medium use databases per LUN across 4-5 LUNs. These will be iSCSI LUNs hosting VMs on VMFS file systems. NFS/CIFS will be used simultaneously for multiple file shares.
Do you have any high bandwidth applications running concurrently with the random IO? (video streaming, backup, etc.)	Backups, Video streaming and large file transfers and streaming will run concurrently and during production hours.
What primary applications will this array support? (data base, file sharing, VMware, etc.)	Databases, File Shares, VMWare VMs, Web servers, Network monitors
VMWare is mentioned. Do you plan to use the array to support general storage virtualization for ESX hosts (how many), support VMware View users (how many), or both?	Currently plan to support 4-6 ESX hosts (versions 3.5, 4.0 and 4.1), possibly up to 12 in the future.
Do you plan on running your VMware Data Stores on nfs, block via iSCSI (VMFS/RDM), or both?	iSCSI
You mention VMware Certified Hardware. Do you mean simple support on VMware's hardware compatibility list, or do you mean support for direct vStorage API Array Integration (VAAI) to offload operations like fast clones, snaps, storage provisioning, etc. to the array from the ESX host?	HCL compatibility
Equipment must have unrestricted expansion cards. - What kinds of "expansion cards"? - Controllers, disks, connections?	10Gb Ethernet (copper and fiber), Fibre Channel And whatever storage controllers are needed for expansion of the storage array (SAS, 40Gb Infiniband, etc.)
Storage must support NFS, CIFS, HTTP, iSCSI, NDMP, FTP, and sFTP protocols - Our solution supports the aforementioned protocols, but have you thought about SMBv2.1 as a viable option as well? Veritas 6.5 or higher, or any other backup package, can directly backup devices with NDMP, would this be applicable in your environment?	NDMP is applicable in our environment. Currently we can utilize this service for filesystems shared via a protocol mentioned here. iSCSI LUNs are not able to be backed up this way. We would like a solution that supports this, if possible.
Support needs to be local to Edwards AFB/Kern County - We can provide 24x7x365 4hr response to this location with options of placing a parts depot onsite at this facility, will this suffice?	24x7x365 telephone support required. Same business day onsite support is sufficient. No need for parts depot onsite.
Equipment must have unrestricted expansion cards. We need this defined – where does NASA want to put unlimited cards; are these cards HBA's?	10Gb Ethernet (copper and fiber), Fibre Channel And whatever storage controllers are needed for expansion of the storage array (SAS, 40Gb Infiniband, etc.)
Equipment must have dedicated read and write caches. Separate Read cache – there is no Write cache	Please clarify…. We require Read & Write cache modules, cannot depend on system memory for cache operations
LDAP aware. We would like to know what version LDAP they are using	OpenLDAP, LDAPS, compatible with version 2 or 3
The storage solution must be compatible with the current Data center infrastructure to include power and rack mounting. What is the present power and rack mounting?	Racks are PARAMOUNT-44U-30W-45D and equipment must be free floating an able to fit inside these racks.
Power is 208 and equipment must have redundant power supplies. Meets Requirement as long as the rack converts to 110 or 220	Autosense 100-250VAC, 50-60Hz requirement.
Racks are PARAMOUNT-44U-30W-45D and equipment must be free floating and able to fit inside these racks. Could they explain free floating dimensions are fine.	We consider free-floating as the ability to be mounted anywhere in the Rack, not limited to position due to weight or other physical restraints.